**REMARKS/ARGUMENTS**

Claim 29 was amended as follows:

(i) the expression "a conductive polymer" is replaced with "a conductive polymer solution or a conductive polymer dispersed liquid"; and

(ii) the expression "formed on a substrate" is added

Item (i) of the above amendment is supported by page 31, lines 2-3, and Item (ii) of the above amendment is supported by page 20, last paragraph, of the present Specification. Also see original Claim 30.

In addition, antecedent basis for Claims 30 et seq, was introduced.

Claims 29-35, 43-46, 48-49 and 51 are rejected under 35 U.S.C. 102(e) as being anticipated by Kim et al. (Pub. No.: US 2003/0099874).

Claim 29 was amended so as to include the expression "a conductive polymer solution or a conductive polymer dispersed liquid", which means that the conductive polymer of the present Application is used in the form of a solution or in the form of a

dispersed liquid. When the conductive polymer is used as a conductive polymer solution, the conductive polymer is dissolved in a solvent, and when the conductive polymer is used as a conductive polymer dispersed liquid, the conductive polymer is dispersed in a solvent dispersant. For example, in the Examples of the present Application, a conductive polymer, PEDOT (poly(ethylene dioxythiophene)) being utilized as a polystyrene sulfonic acid complexes (PEDOT/PSS complexes) is used in the form of an aqueous dispersion to prepare a thin layer transistor (page 55, line 22 through page 56, line 8).

In the office action issued on November 26, 2008 (FINAL), claim 30 is rejected as being anticipated by Kim (page 2), in which the Examiner states that "Kim shows impregnating a solution [0040] or a dispersed [0040] liquid containing the conductive polymer [0040] in the receptive layer (see claim 29 discussion)".

However, what is taught in [0040] of Kim is an oily phase in which a surfactant is dispersed into a solvent. It is taught by Kim that, into the oily phase, an ionic conductive polymer membrane such as Nafion 112 membrane (DuPont) is soaked ([0041]), and, then, an ionic conductive material [0042] and a precursor of

a porous support [0047] are added into the oily phase, whereby the ionic conductive polymer membrane containing the ionic conductive material (inorganic conductive nano-particles) impregnated in the porous support ([0050]) is obtained. Namely, the conductive polymer of Kim et al. is used as a membrane and no conductive polymer solution nor conductive polymer dispersed liquid in which a conductive polymer is dissolved or dispersed in a solvent is disclosed by Kim.

Accordingly, "the method for manufacturing an electrical circuit comprising a step of forming at least a part of the electrical circuit by impregnating a conductive polymer solution or a conductive polymer dispersed liquid in a receptive layer" of the present Application is not disclosed by Kim. Nor is there any reason to meet this requirement, based on Kim.

Further, claim 29 was also amended so as to require that the receptive layers be "formed on a substrate".

A porous support is taught by Kim. Although the position of the porous support in the polymer electrolyte is not clearly described by Kim, the porous support should be in the cluster portion (microchannel) of the polymer electrolyte because the

ionic conductive materials exist in the cluster portion (microchannel) (Fig. 1, [0039]) and the ionic conductive materials are impregnated into the porous support [0050]. Namely, the porous support of Kim is incorporated in the polymer electrolyte.

However, the substrate of the present Application is used as a support for all the elements forming an electrical circuit as shown, for example, in Figs. 4(a) - 4(d) which are explained in page 53, line 18 through page 56, line 8 of the present Specification, namely, a receptive layer in which a conductive polymer solution or dispersed liquid is impregnated, an electrode, an insulator layer, a busline, etc.

Accordingly, the porous support of Kim is different from the substrate of the present Application, on which the receptive layer is formed. Kim teaches no other support nor substrate. Therefore, the substrate on which the receptive layer is formed of the present Application is not disclosed by Kim. The present invention as claimed requires manufacturing an electrical circuit. Although the present Claim 1 does not specify a particular substrate, this difference helps explain the

difference between the invention as claimed and Kim. More than an obvious modification is necessary to bridge the difference.

Accordingly, "the method for manufacturing an electrical circuit comprising a step of forming at least a part of the electrical circuit by impregnating a conductive polymer solution or a conductive polymer dispersed liquid in a receptive layer formed on a substrate" of the present Application is not disclosed by Kim nor would it be obvious to modify Kim to meet the claim requirements in view of differences in use.

Kim is also applied alone or in combination with other art as rendering the invention obvious. However, the method for manufacturing an electrical circuit of the present Application is absolutely different from the method to manufacture a polymer electrolyte used for a fuel cell disclosed by Kim.

In the method of Kim, an ionic conductive polymer membrane such as Nafion 112 membrane (DuPont) is soaked into the oily phase in which a surfactant is dispersed into a solvent ([0040]-[0041]), and, then, an ionic conductive material [0042] and a precursor of a porous support [0047] are added into the oily phase, whereby an ionic conductive polymer membrane containing

the ionic conductive material (inorganic conductive nano-particles) impregnated in the porous support ([0050]) is obtained.

Namely, the porous support is incorporated in the conductive polymer membrane, and thus the conductive polymer (membrane) of Kim cannot be impregnated in the porous support of Kim.

Accordingly, no process of impregnating a conductive polymer (solution or dispersed liquid) in a receptive layer formed on a substrate is disclosed by Kim.

As discussed above, the method of amended claim 29 of the present Application is not disclosed by Kim. Thus, the amended claim 29 is not anticipated by Kim.

Further, the object of the present Application is absolutely different from the object of the invention of Kim.

An object of the present Application is to provide a method for manufacturing an electrical circuit as well as a thin film transistor having a fine and complex circuit pattern in a simple and quick manner without a thermal treatment by impregnating a conductive polymer solution or a conductive polymer dispersed liquid in a receptive layer formed on a substrate, the conductive

polymer exhibiting p-type conduction or n-type conduction (page 4, lines 8-13 of the present Specification).

On the other hand, an object of Kim is to provide a polymer electrolyte used for a fuel cell obtained by soaking an ionic conductive polymer membrane such as Nafion 112 membrane (DuPont) into the oily phase in which a surfactant is dispersed into a solvent ([0040]-[0041]), followed by adding an ionic conductive material [0042] and a precursor of a porous support [0047] into the oily phase containing the conductive polymer membrane to obtain an ionic conductive polymer membrane containing the ionic conductive material (inorganic conductive nano-particles) impregnated in the porous support ([0050]). It is clear from the above discussion that no method of manufacturing an electrical circuit as well as a thin film transistor having a fine and complex circuit pattern is suggested or motivated by Kim.

Accordingly, the above amended claim 29 and claims dependent thereon cannot be obvious over Kim. Claims 30-35, 43-46, 48-49 and 51 are also patentable over Kim for the same reasons.

Additional rejections of dependent claims were also made.

Claims 36-39 are rejected over a combination of Kim and Fukushima. However, Fukushima is cited with respect to ejecting the conductive polymer into a receptive layer. Combining its teaching with Kim does not provide the teaching missing from Kim. This is detailed above.

Therefore no combination of Kim and Fukushima renders the invention obvious.

Claims 40-42 are rejected over Kim in view of Hannah. However, Hannah is cited with respect to the conductive polymer. Combining it with Kim does not provide the missing teaching detailed above. Therefore no combination renders the invention of Claims 40-42 obvious.

Claim 47 is rejected over a combination of Kim and Nakimi. Again the combination teaching fails to provide the teaching missing from Kim alone.

Claim 50 is rejected as obvious over Kim alone. As detailed above, Kim does not render the present invention obvious.

Claims 30 - 51 are dependent to claim 29. Claim 29 is not anticipated or obvious over Kim (both of which are explained in

detail above). The secondary art fails to provide additional teaching to overcome the differences, even when selectively combined with Kim. These claims should therefore also be allowed.

In view of the above, the rejections are avoided. Allowance of the application is therefore respectfully requested.

Respectfully submitted,

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